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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,967	07/26/2000	Naoyuki Inoue	000929	8413

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ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP  
1725 K STREET, NW  
SUITE 1000  
WASHINGTON, DC 20006

EXAMINER

SORRELL, ERON J

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 02/18/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

8

**Office Action Summary**

Application No.

09/625,967

Applicant(s)

INOUE, NAOYUKI

Examiner

Eron J Sorrell

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)     | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 2182

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/24/03 has been entered.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flannery (U.S. Patent No. 6,424,796) in view of Bork et al. (U.S. Patent No. 6,633,932 hereinafter "Bork")

Art Unit: 2182

and further in view of Chan et al. (U.S. Patent No. 6,285,091 hereinafter "Chan").

4. Referring to claim 1, Flannery teaches an expansion device used for transmission of data between a computer and a data read out device comprising:

- a main body connected to the computer (see lines 46-59 of column 4);

- a mounting portion provided on the main body in which the readout device is mountable and the readout device being able to read information processing data and to read sound reproducing data from a storage unit storing at least the sound reproducing data (see lines 16-22 of column 3);

- audio circuits for processing the sound reproducing data (see item labeled 310 in figure 5);

- a first power input portion (see lines 34-40 of column 5);

and

- a second power input portion being supplied source power for the expansion device from a second power supply other than the power supply for the computer (see lines 34-40 of column 5);

wherein the operation of the audio circuits and the readout device are enabled by supplying source power thereto from the

Art Unit: 2182

first or second power input portion (see lines 34-40 of column 5).

Flannery fails to disclose that the first power input portion is supplied with source power for the expansion device from a power supply for the computer, however Flannery does disclose that the means for connecting the expansion device to the host computer can be an IDE/ATA bus, a SCSI bus, **or the like** (emphasis added, see lines 46-59 of column 4).

Bork teaches, in an analogous system, a peripheral device coupled to a computer comprising a first and second power input portion wherein the first power input portion is supplied with source power for the expansion device from a power supply for the computer. Bork discloses the power input from the power supply for the computer is a USB bus, which has wires for distributing power to the peripheral device (see lines 21-35 of column 2).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the apparatus of Flannery with the teachings above teachings of Bork. One of ordinary skill in the art would have been motivated to make such modification in order to be able to recharge the batteries in the device of Flannery and not have to purchase new ones as suggested by Bork (see lines 8-13 of column 1).

The combination of Flannery and Bork fails to disclose the limitation of supplying source power to the expansion device from the second power input portion when the second power input portion has a higher voltage level than the first power input portion and supplying source power to the expansion device from the first power input portion when the first power input portion has a higher voltage level than the second power input portion.

Chan teaches, in an analogous system, a portable device with first and second power input portions wherein source power is supplied to the expansion device from the second power input portion when the second power input portion has a higher voltage level than the first power input portion and source power is supplied to the expansion device from the first power input portion when the first power input portion has a higher voltage level than the second power input portion.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Flannery and Bork with the above teachings of Chan. One of ordinary skill in the art at the time of the applicant's invention would have been motivated to make such modification to reduce voltage drops when switching from a primary to an auxiliary power source and vice versa as suggested by Chan (see lines 10-25 of column 1).

5. Referring to claim 2, Flannery discloses the operating portion for controlling an operation of the readout device is provided in the main body (see lines 1-14 of column 4).

6. Referring to claim 3, Flannery discloses the mounting portion is adapted to selectively and detachably accommodate a plurality of kinds of expansion units other than the readout device (see lines 52-58 of column 1).

7. Referring to claim 4, Flannery discloses an expansion device wherein a second power supply is an external DC power supply (see item labeled 420 in figure 6).

8. Referring to claim 5, Flannery discloses the second power supply is a battery built thereinto (see item labeled 420 in figure 6).

9. Referring to claim 6, Bork discloses the host computer is a notebook computer. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the computer of Flannery with the teachings of Bork such that the computer is a notebook computer so it can

Art Unit: 2182

be easily portable.

10. Referring to claim 7, Flannery discloses a device wherein a plurality of expansion units are a CD-ROM drive, a floppy disk drive, a DVD drive, a memory card drive, and a hard disk drive (see lines 65-67 of column 2 and lines 1-15 of column 3).

11. Referring to claim 8, Flannery discloses a battery for use in the apparatus but is silent on the voltage of the battery. Bork discloses the USB cable carries a voltage of 4.5 volts (see lines 27-42 of column 6).

It is well know in the art that several types of batteries output voltages less than 4.5 volts (for example AA, AAA, lithium batteries, etc.) These types of batteries are typically used in such portable devices because they are small and inexpensive.

12. Referring to claim 9, Flannery discloses the CD-ROM drive has both a decoding circuit for decoding digital data and a decoding circuit for decoding analog data and wherein switching between a digital data signal and an analog music signal is automatically performed according to the kind of the storage



Art Unit: 2182

medium (see items labeled 310,312, and 318 in figure 5 and 34-67 of column and lines 1-8 in column 5).

13. Referring to claim 10, Flannery discloses the readout device indicates a playing track number and a piece number in a display device of the operating portion when the storage medium is an audio disk (see item labeled 210 in figure 4A).

14. Referring to claim 11, Bork teaches the battery in the expansion device is chargeable (see lines 8-13 of column 1).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the apparatus of Flannery with the teachings of Bork such that the battery is chargeable. One of ordinary skill in the art would have been motivated to make such modification in order to save money on purchasing replacement batteries.

15. Referring to claims 12,13, and 15, Bork discloses that the host device is connected and disconnected to the expansion device by a cable and that the expansion device by connecting a connector provided in the host directly to a connector provided on the expansion device (see item labeled 58 in figure 16 and paragraph bridging columns 6 and 7).

Art Unit: 2182

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the apparatus of Flannery with the above teachings of Bork. One of ordinary skill in the art would have been motivated to make such modification in order to easily couple and decouple the expansion device to the host computer.

16. Referring to claim 14, Flannery discloses a connector is installed in the mounting portion provided in the main body, wherein a corresponding connector is provided in the readout device, and wherein the readout device is connected to the main body only by inserting the readout device into the mounting portion (see lines 16-37 of column 3).

17. Referring to claim 16, Chan discloses the second power input portion is provided in the first input portion (see lines 25-37 of column 1).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Flannery and Bork with the above teaching of Chan. One of ordinary skill in the art would have been motivated to make such modification in order to easily recharge

Art Unit: 2182

the battery with the first power input portion as suggested by Chan (see lines 25-37 of column 1).

### ***Response to Arguments***

18. Applicant's arguments with respect to claim 1 has been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eron J Sorrell whose telephone number is 703 305-7800. The examiner can normally be reached on Monday-Friday 9:00AM - 5:30PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Gaffin can be reached on 703 308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Art Unit: 2182

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EJS  
February 9, 2004

  
JEFFREY GAFFIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100